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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/868,151

10/17/2001

Olivier Hersent

NCX-002 (6909/3)

6043

7590

03/13/2007

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EXAMINER

SIMITOSKI, MICHAEL J

ART UNIT

PAPER NUMBER

2134

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/868,151

Applicant(s)

HERSENT, OLIVIER

Examiner

Michael J. Simitoski

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The response of 12/28/2006 was received and considered.
2. Claims 1-10 are pending.

Response to Arguments

3. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 & 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent Application Publication 2002/0094084 to Wasilewski et al. (**Wasilewski**) in view of U.S.

Patent 5,511,122 to **Atkinson**.

Regarding claim 1, Wasilewski discloses carrying out, at a subscriber installation specific access interface (SABER, Fig. 1, & ¶123 – SP provisions CAM with CA information & Fig. 12), police control operations (conditional access where control words are encrypted, ¶47) on streams of packets transmitted to the concentrating router (NAN, Fig. 1), within the framework of a contract between the subscriber and a manager of a shared network (¶36, CAM receives access requirements (contract) from SP), and after having carried out the control operations concerning

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a packet to be transmitted, transmitting the packet from said access interface (SABER) to the concentrating router (NAN, Fig. 1), each packet being transmitted with a signature (§60 – signature added to MSK packet) based on a secret (private key/public key pair, §60), authenticating that the packet has been subjected to the control operations (§63). Wasilewski lacks the secret shared with the concentrating router. However, Atkinson teaches an analogous art where packets that have been assigned digital signatures are authenticated at intermediate routers/gateways (col. 10, lines 20-33), permitting policy-based routing (col. 11, lines 17-19). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wasilewski to share the secret (private key/public key pair) with the concentrating router. One of ordinary skill in the art would have been motivated to perform such a modification to authenticate the packet at the intermediate now, permitting policy-based routing, as taught by Atkinson (col. 10, lines 20-33 & col. 11, lines 17-19).

Regarding claim 2, Wasilewski discloses wherein the signature consists of a code word added to the content of the packet (§60).

Regarding claim 3, Wasilewski discloses wherein said code word is calculated by hashing at least part of a content of the packet, involving the shared secret (content is hashed and encrypted with private key, §60).

Regarding claim 4, Wasilewski discloses enciphering a content of the packet by means of a private key forming said shared secret (§60).

Regarding claims 6-9, the claims are interface claims, substantially equivalent to method claims 1-4. Therefore the claims are rejected under similar rationale.

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6. Claims 5 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wasilewski and Atkinson**, as applied to claims 1 & 6 above, in further view of U.S. Patent 5,726,660 to Purdy et al. (**Purdy**). Wasilewski, as modified above, lacks the signature and control operations carried out within a single integrated circuit. However, Purdy teaches that combining multiple functional components on a single integrated circuit reduces manufacturing costs significantly (col. 3, line 61 – col. 4, line 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to perform the signature and control operations on a single integrated circuit. One of ordinary skill in the art would have been motivated to perform such a modification to significantly reduce manufacturing costs, as taught by Purdy (col. 3, line 61 – col. 4, line 2).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. The '904, '916, '383 and '228 references are cited for teaching appending digital signatures to packets for authentication and integrity.
- b. The '865 & '620 references are cited for teaching utilizing digital signatures at intermediate nodes.
- c. The '271 reference is cited for teaching enforcing a security policy between two networks.
- d. The '565 reference is cited for teaching marking a packet with a flag if an operation (signature checking) has been performed.

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e. The '242 reference is cited for teaching an authority server determining, based on customer profiles, a customer's authority and signing an outgoing communication based on that authority (with a key associated with the authority).

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Simitoski whose telephone number is (571) 272-3841. The examiner can normally be reached on Monday - Thursday, 6:45 a.m. - 4:15 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

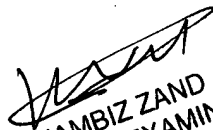
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJS



March 6, 2007



KAMBIZ ZAND
PRIMARY EXAMINER